

What is claimed is:

1. A curing method, comprising the steps of:

(a) providing an article including opposing first and second substrates and a light curable sealant for attaching the first substrate to the second substrate, wherein the first substrate is provided with a light-shielding matrix formed thereon, and the second substrate is provided with a metallization pattern formed thereon;

(b) irradiating the article with light entering the article from the first substrate to reach the light curable sealant; and

(c) irradiating the article with light entering the article from the second substrate to reach the light curable sealant,

whereby the light curable sealant is cured by the light entering the article from the first and second substrates.

2. The method as claimed in claim 1, wherein the steps of (b) and (c) are conducted simultaneously.

3. The method as claimed in claim 1, wherein the light curable sealant is a UV curable sealant, and the light is generated from a UV irradiation unit.

4. The method as claimed in claim 1, wherein the article is a liquid crystal display cell.

5. A curing apparatus, comprising:

first and second stages each having a surface adapted for holding a work piece having opposing first and second substrates and a light curable sealant for attaching the first substrate to the second substrate;

means for transporting the work piece from the first stage to the second stage; and

a light source,

wherein, when the work piece is placed on the first stage, the light generated by the light source enters the work piece from the first substrate to reach the light curable sealant; and, when the work piece is placed on the second stage, the light from the light source enters the work piece from the second substrate to reach the light curable sealant,

whereby the light curable sealant is cured by the light entering the work piece from the first and second substrates.

6. The curing apparatus as claimed in claim 5, wherein the light source comprises a first irradiation unit and a second irradiation unit arranged on an opposite side of the first and second stages from the first irradiation unit.

7. The curing apparatus as claimed in claim 5, wherein the transporting means comprises a robot utilizing a chuck assembly to hold the work piece.

8. A curing apparatus, comprising:

first and second stages each having a surface adapted for holding a work piece having opposing first and second substrates and a light curable sealant for attaching the first substrate to the second substrate;

mechanism for holding and turning over the work piece; and

a light source,

wherein, when the work piece is placed on the first stage, the light generated by the light source enters the work piece from the first substrate to reach the light curable sealant; and, when the work piece is placed on the second stage, the light from the light source enters the work piece from the second substrate to reach the light curable sealant,

whereby the light curable sealant is cured by the light entering the work piece from the first and second substrates.

9. The curing apparatus as claimed in claim 8, wherein the light source comprises a first irradiation unit facing the surface of the first stage, and a second irradiation unit facing the surface of the second stage.

10. The curing apparatus as claimed in claim 8, further comprising:

first means for transporting the work piece from the first stage to the holding and turning over mechanism; and

second means for transporting the work piece from the holding and turning over mechanism to the second stage.

11. The curing apparatus as claimed in claim 10, wherein the transporting means comprises a robot utilizing a chuck assembly to hold the work piece.

12. A curing apparatus, comprising:

means for supporting a work piece having opposing first and second substrates and a

light curable sealant for attaching the first substrate to the second substrate; and

a light source including a first irradiation unit and a second irradiation unit arranged on an opposite side of the work piece from the first irradiation unit,

wherein, when the work piece is supported by the supporting means, the light generated by the first irradiation unit enters the work piece from the first substrate to reach the light curable sealant, and the light generated by the second irradiation unit enters the work piece from the second substrate to reach the light curable sealant.

13. The curing apparatus as claimed in claim 12, wherein the supporting means comprises a stage including a transparent work area for holding the work piece.

14. The curing apparatus as claimed in claim 12, wherein the supporting means comprises clamps for holding the edges of the first and second substrates of the work piece.

15. The curing apparatus as claimed in claim 12, wherein the supporting means comprises a plurality of pins for supporting the work piece.

16. The curing apparatus as claimed in claim 12, wherein the light curable sealant is substantially not shadowed by the supporting means thereby the light curable sealant is cured by the light entering the work piece from the first and second substrates.

17. A liquid crystal display cell comprising:

a first substrate with a light-shielding matrix formed thereon;

a second substrate with a metallization pattern formed thereon;

a liquid crystal layer sandwiched between the first and the second substrates; and

a light curable sealant for attaching the first substrate to the second substrate,

wherein the light curable sealant is cured by

(a) irradiating the liquid crystal display cell with light entering the liquid crystal display cell from the first substrate to reach the light curable sealant; and

(b) irradiating the liquid crystal display cell with light entering the liquid crystal display cell from the second substrate to reach the light curable sealant,

whereby the light curable sealant is cured by the light entering the liquid crystal display cell from the first and second substrates.

18. The liquid crystal display cell as claimed in claim 17, wherein the irradiating steps (a) and (b) of the liquid crystal display cell are conducted simultaneously.

19. The liquid crystal display cell as claimed in claim 17, wherein the light curable sealant is a UV curable sealant, and the light is generated from a UV irradiation unit.